

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 100873-1 WO	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, Item 5 below.	
International application No. PCT/GB 03/04655	International filing date (day/month/year) 28/10/2003	(Earliest) Priority Date (day/month/year) 31/10/2002
Applicant ASTRAZENECA AB		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the title,

- ☐ the text is approved as submitted by the applicant.
- ☒ the text has been established by this Authority to read as follows:

ASSAY FOR THE SCREENING OF COMPOUNDS ACTING THROUGH ERBB-2

5. With regard to the abstract,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

- ☐ as suggested by the applicant.
- ☐ because the applicant failed to suggest a figure.
- ☐ because this figure better characterizes the invention.
- ☒ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/GB 00/04655

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, EMBASE, MEDLINE, CHEM ABS Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 804 396 A (PLOWMAN GREGORY D) 8 September 1998 (1998-09-08) column 18, line 30 -column 19, line 6; claims 1-18; examples 1-3 ---	1-10
X	WO 02 09684 A (ISTVAN ENYEDY; SHAOMENG WANG (US); DAJUN YANG (US); UNIV GEORGETOWN) 7 February 2002 (2002-02-07) page 12, line 4 -page 16, line 5; figure 1; table 1 --- -/--	1-10

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

20 February 2004

Date of mailing of the international search report

04/03/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Stachowiak, O

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/GB/04655

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>RAM TRACY G ET AL: "Blocking HER-2/HER-3 function with a dominant negative form of HER-3 in cells stimulated by heregulin and in breast cancer cells with HER-2 gene amplification"</p> <p>CELL GROWTH AND DIFFERENTIATION, vol. 11, no. 3, March 2000 (2000-03), pages 173-183, XP001179375</p> <p>ISSN: 1044-9523</p> <p>the whole document</p> <p>---</p>	1-10
A	<p>WO 02 41828 A (ZENG YIXING; WANG JINGSON (CN); ZHU XIAO F (CN); YANG DAJUN (US))</p> <p>30 May 2002 (2002-05-30)</p> <p>page 12, paragraph 2 -page 13, paragraph 1</p> <p>---</p>	1-10
A	<p>RAM T G ET AL: "PHOSPHATIDYLINOSITOL 3-KINASE RECRUITMENT BY P185-ERB-2 AND ERB-3 IS POTENTLY INDUCED BY NEU DIFFERENTIATION FACTOR/HEREGULIN DURING MITOGENESIS AND IS CONSTITUTIVELY ELEVATED IN GROWTH FACTOR-INDEPENDENT BREAST CARCINOMA CELLS WITH C-ERB-2 GENE AMPLIFICATION"</p> <p>CELL GROWTH AND DIFFERENTIATION, THE ASSOCIATION, PHILADELPHIA, PA, US, vol. 7, no. 5, May 1996 (1996-05), pages 551-561, XP008027248</p> <p>ISSN: 1044-9523</p> <p>cited in the application</p> <p>the whole document</p> <p>---</p>	1-10
A	<p>RAM TRACY G ET AL: "Insulin-like growth factor and epidermal growth factor independence in human mammary carcinoma cells with c-erbB-2 gene amplification and progressively elevated levels of tyrosine-phosphorylated p185-erbB-2"</p> <p>MOLECULAR CARCINOGENESIS, vol. 15, no. 3, 1996, pages 227-238, XP009025948</p> <p>ISSN: 0899-1987</p> <p>the whole document</p> <p>---</p>	1-10
A	<p>RAM TRACY G ET AL: "Heregulin-beta 1s especially potent in activating phosphatidylinositol 3-kinase in nontransformed human mammary epithelial cells"</p> <p>JOURNAL OF CELLULAR PHYSIOLOGY, vol. 183, no. 3, June 2000 (2000-06), pages 301-313, XP009025944</p> <p>ISSN: 0021-9541</p> <p>the whole document</p> <p>---</p>	1-10
	<p>---</p> <p>-/--</p>	

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB/04655

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	LEWIS G D ET AL: "GROWTH REGULATION OF HUMAN BREAST AND OVARIAN TUMOR CELLS BY HEREGULIN: EVIDENCE FOR THE REQUIREMENT OF ERBB2 AS A CRITICAL COMPONENT IN MEDIATING HEREGULIN RESPONSIVENESS" CANCER RESEARCH, AMERICAN ASSOCIATION FOR CANCER RESEARCH, BALTIMORE, MD, US, vol. 56, 15 March 1996 (1996-03-15), pages 1457-1465, XP002910611 ISSN: 0008-5472 the whole document	1-10
A	MEDELSON J ET AL: "THE EGF RECEPTOR FAMILY AS TARGETS FOR CANCER THERAPY" ONCOGENE, BASINGSTOKE, HANTS, GB, vol. 19, no. 56, 2000, pages 6550-6565, XP001010397 ISSN: 0950-9232 cited in the application the whole document	1-10
P,X	WO 03 061559 A (UNIV VERMONT) 31 July 2003 (2003-07-31) claims 46-56	1-10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/03/04655

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5804396	A	08-09-1998	NONE	
WO 0209684	A	07-02-2002	CA 2417500 A1 WO 0209684 A2	07-02-2002 07-02-2002
WO 0241828	A	30-05-2002	AU 3925802 A WO 0241828 A2	03-06-2002 30-05-2002
WO 03061559	A	31-07-2003	WO 03061559 A2 US 2003216309 A1	31-07-2003 20-11-2003